

Work Order ID 156681***156681***

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Monday, February 06, 2017 1:04:55 PM

Item ID: D4044-5 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Aft Rib
Start Date: 3/15/2017 Start Qty: 2.00 ***2*** Cust Item ID:
Required Date: 3/20/2017 Req'd Qty: 2.00 ***2*** Customer:
Reference:

Approvals: Process Plan: DAS 21 9-89 Date: FEB 07 2017 Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4044	A								
100		0.00							
100									
Large Fab	Memo	0.63							
Large Fab	1- Cut tube 60" and remove identification markings 2- Bend tube with manuel pipe bender as per template DT9579 (Make first line at 15.00") 3- Trim access tube material to finish size as per dwg D4044								
110	QC5- Inspect part completeness to step on W/O	0.00							
110									
QC	Memo	0.01							
Quality Control									
120	Identify as per dwg & Stock Location: <u>W1A4</u>	0.00							
120									
Packaging	Memo	0.00							
Packaging									

2x DC 2017/03/172 MAR 2 4 2017 DAS 24 9-892 MAR 2 4 2017 DAS 24 9-89

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Work Order ID 156681***156681***

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Monday, February 06, 2017 1:04:55 PM

Item ID: D4044-5

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Aft Rib

Start Date: 3/15/2017 Start Qty: 2.00

2

Cust Item ID:

Required Date: 3/20/2017 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC21- Final Inspection - Work Order Release

0.00

130

17/3/28 J

QC

Memo

0.03

Quality Control

PA 2017/03/27

DAS
21
9-89 MAR 27 2017



DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

DISPOSITION		AGAINST DEPARTMENT/PROCESS			
Work Order: _____	Suspected Unapproved	Rework ☐	Skid-tube ☐	Cross tube ☐	Water Jet ☐
Part No. _____		Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐
NCR No. _____		Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐
Date: _____	Step #: _____	QTY Effective : _____			
Description Work Order Deviation		Disposition			
		MRB (QSI042) Approval			
		Completed By			
		Lead hand / Supervisor Approval Verification			
		QC / QA Coordinator Approval			
FAULT CATEGORY					
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐				
		OTHER : ☐			

Picklist Print

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Page 1

Work Order ID: 156681

156681

Parent Item: D4044-5

D4044-5

Parent Item Name: Aft Rib

Start Date: 3/15/2017

Required Date: 3/20/2017

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP RevA: new issue DD 10/01/05 verified by:EC IPP Rev:B as per
dwg revA DD 10.02.18 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304TS0.750W.049

Purchased

No

100

f

669.5670

5

10.52632

✓ *M304TS0 750W 049*

**

DC 2017/03/16

304 SQ Tube .75x.75x.049W

Location

Loc Qty

Loc Code

WA004

669.567

B135899 →

12

M134940

38

M135226

8.461

M135711

65

M135899

161.906

M135996

17.9

M136378

378.3

Date: _____

QA Closed: Date:

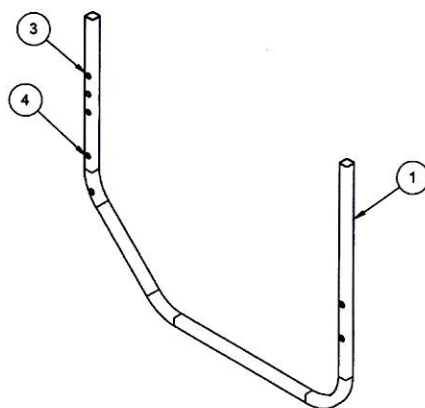
Work Order update only

WORK ORDER NON-CONFORMANCE / UPDATE

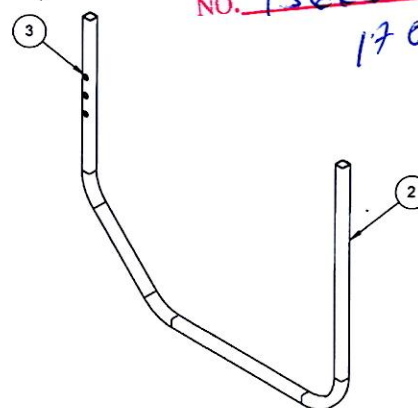
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ITEM	QTY -041	QTY -043	P/N	DESCRIPTION
	X		D4044-041	FWD RIB ASSY
		X	D4044-043	CENTER RIB ASSY
1	1		D4044-1	FWD RIB
2		1	D4044-3	CENTER RIB
3	3	3	D3759-1	BUSHING
4	4		D4021-9	BUSHING

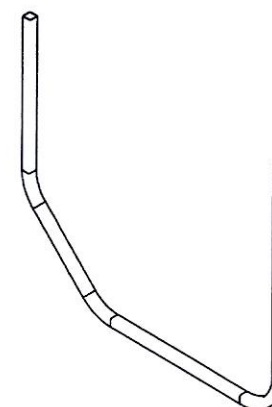
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 156681 MLD
17 02 07



D4044-041 FWD RIB ASSEMBLY



D4044-043 CENTER RIB ASSEMBLY



D4044-5 AFT RIB

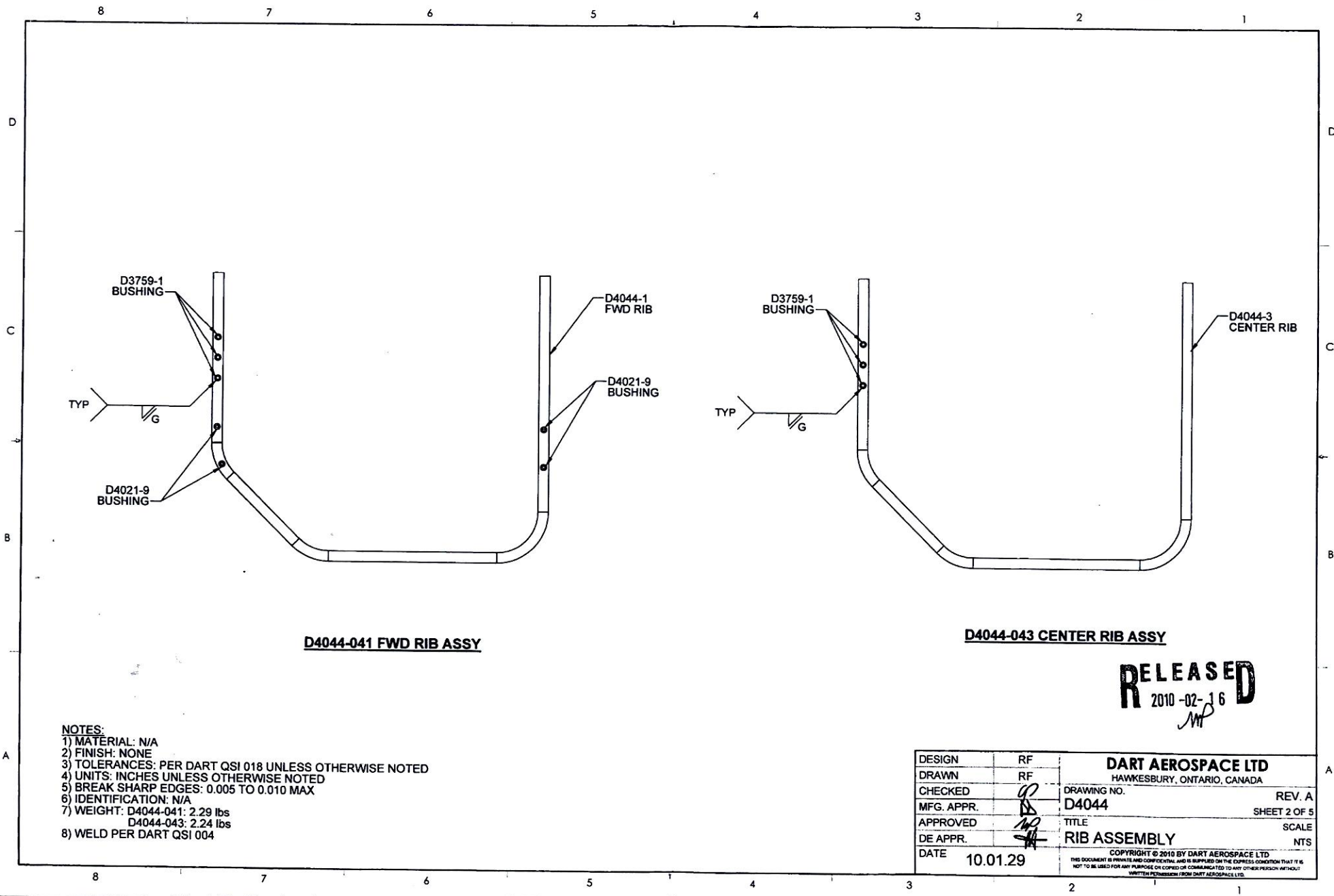
RELEASED
2010-02-16
JH

A	NEW ISSUE	RF	10.01.29
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED	RF		
MFG. APPR.	RF		
APPROVED	RF		
DE APPR.	RF		
DATE	10.01.29		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4044** REV. A
TITLE **RIB ASSEMBLY** SCALE NTS

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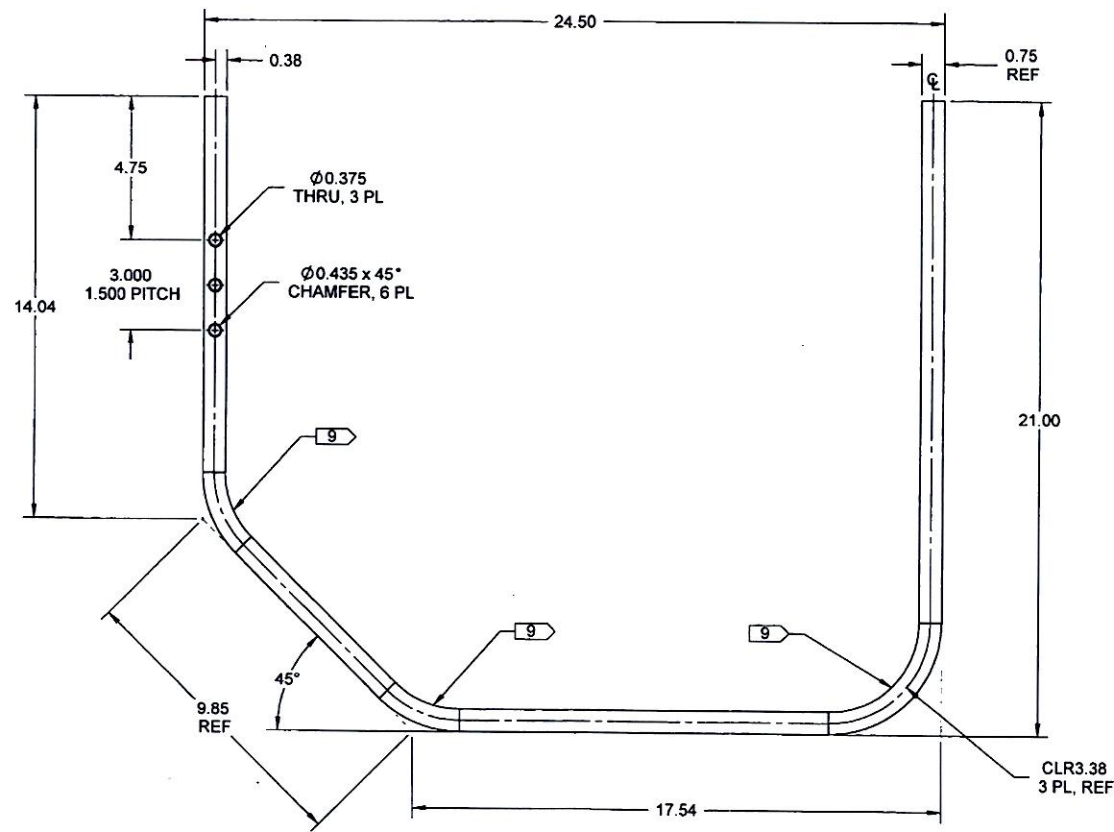
D4044-041 FWD RIB ASSY

D4044-043 CENTER RIB ASSY

- NOTES:**
 1) MATERIAL: N/A
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: N/A
 7) WEIGHT: D4044-041: 2.29 lbs
 D4044-043: 2.24 lbs
 8) WELD PER DART QSI 004

RELEASED
 2010-02-16
MP

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>RF</i>	DRAWING NO. D4044	REV. A
MFG. APPR.	<i>RF</i>	SHEET 2 OF 5	
APPROVED	<i>RF</i>	TITLE	SCALE
DE APPR.	<i>RF</i>	RIB ASSEMBLY	NTS
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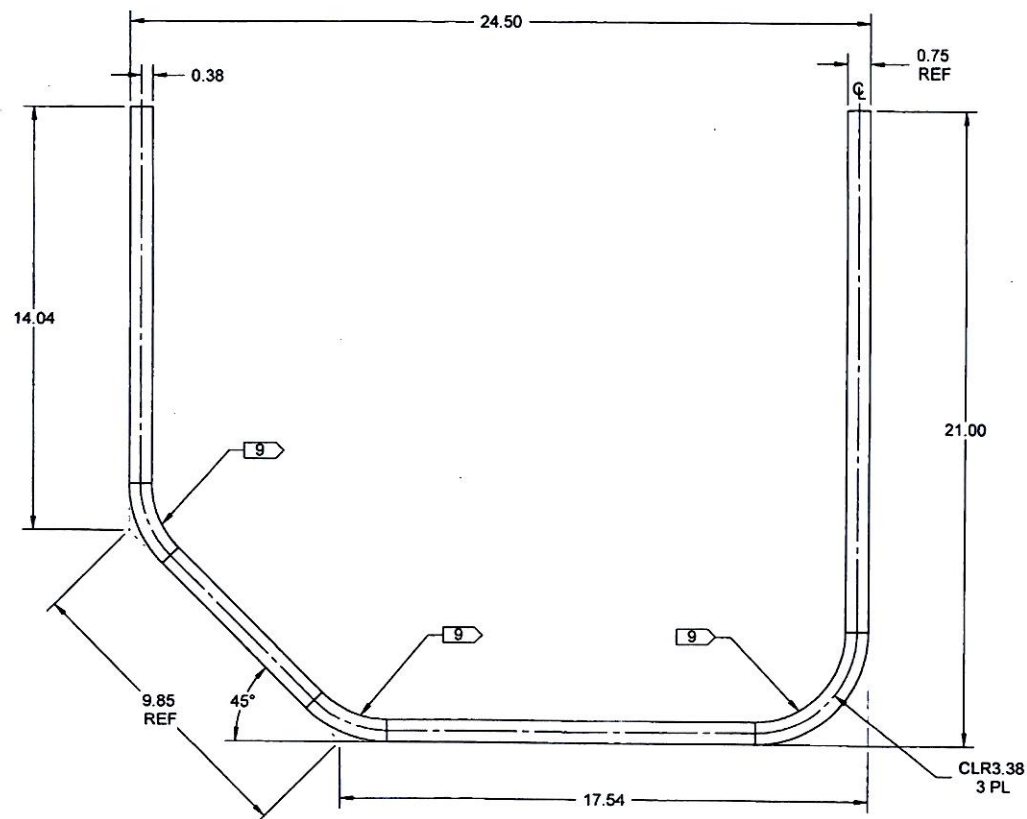
D4044-3 CENTER RIB

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.750 x 0.75 x 0.049 WALL
REF DART SPEC. M304TS0.750V.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.20 lbs
- 8) TUBE FLAT LENGTH 59.31 REF
- 9) ALLOWABLE WRINKLING IN BENDS UP TO 0.15" DEEP MAX

RELEASED
2010-02-16
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DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>SS</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>SS</i>	D4044	SHEET 4 OF 5
APPROVED	<i>MP</i>	TITLE	SCALE
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D4044-5 AFT RIB

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBE, 0.750 x 0.75 x 0.049 WALL
REF DART SPEC. M304TS0.750W.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 2.21 lbs
- 8) TUBE FLAT LENGTH 59.31 REF
- 9) ALLOWABLE WRINKLING IN BENDS UP TO 0.15" DEEP MAX

RELEASED
2010-02-16
MP

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>RF</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>RF</i>	D4044	SHEET 5 OF 5
APPROVED	<i>RF</i>	TITLE	SCALE
DE APPR.	<i>RF</i>	RIB ASSEMBLY	NTS
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